

# STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT SECRETARY

September 8, 2005

U.S. Army Corps of Engineers Asheville Regulatory field Office 151 Patton Avenue / Room 208 Asheville, North Carolina 28801-5006

Attention:

Ms. Angie Pennock

**NCDOT Coordinator** 

Dear Madam:

Subject:

Revisions to Nationwide 23, 33, and 12 Permit Application for the proposed replacement of Bridge No. 251 over Hall Creek and approaches on SR 1128 southwest of Morganton, Burke County, Federal Aid Project: BRZ-1128 (5),

State Project No. 8.2852801, WBS Element 33406.1.1, TIP B-4040

Reference:

Nationwide Permit Application dated July 18, 2005

Please find enclosed a copy of the revised PCN, permit drawings, and half-size plan sheet 4 for the above referenced project. As stated in the original application, the North Carolina Department of Transportation (NCDOT) proposes to replace existing Bridge No. 251 on SR 1128 over Hall Creek (DWQ Index # 11-34-2) in Burke County. Please note however, the original application cover letter misstated the project description and proposed impacts. The project actually involves, replacement of the existing bridge structure with a triple barrel (3 @ 9 feet x 8 feet) reinforced concrete box culvert (RCBC) at approximately the same location and roadway elevation of the existing structure. The approach roadway will consist of one 10-foot lane and one lane varying from 10 feet to 13 feet with shoulder widths of at least 5 feet. Shoulder widths will be increased by at least 3 feet where guardrail is warranted.

#### **Revised Impacts to Waters of the United States**

<u>Permanent Impacts</u>: Due to design changes, permanent stream impacts have been reduced from 123 linear feet to a total of 98 feet of stream channel. Surface water impacts from the proposed project will remain at 0.02 acre. Permanent impacts to jurisdictional surface water result from fill for construction of the box culvert.

<u>Temporary Impacts</u>: In addition to the permanent impacts to Hall Creek, temporary impacts have increased. There will remain 0.03 acre of temporary fill in surface waters, however, 25 feet of stream channel will be temporary impacted from construction of the proposed project.

WEBSITE: WWW.NCDOT.ORG

Utility Impacts: Temporary utility impacts remain unchanged; as stated in the original application, this will occur to 4 linear feet (0.002 ac) of Hall Creek from the installation of an 8inch diameter water line within the aforementioned disturbed area. Installation of the water line will involve excavation of the bottom of the stream. Excavation will be approximately 4 feet wide and 20 feet in length. The excavated material will be placed back in the streambed after the proposed water line is installed.

Thank you for your time and assistance with this project. Please contact Tyler Stanton at (919) 715-1439 or tstanton@dot.state.nc.us if you have any questions or need additional information.

Sincerely,

Gregory J. Thorpe, Ph.D.
Environmental Management Director, PDEA

Cc: W/attachment

Mr. Brian Wrenn, NCDWQ Mr. Mike Parker, NCDWQ Ms. Beth Harmon, EEP

Page 2 of 2 NCDOT TIP B-4040

Offic	1. Check all of the approval(s)    Section 404 Permit     Section 10 Permit     401 Water Quality Cert     2. Nationwide, Regional or Go     3. If this notification is solely is not required, check here:     4. If payment into the North for mitigation of impacts, and check here:     5. If your project is located in 4), and the project is with Environmental Concern (see     1. Applicant Information     1. Owner/Applicant Information     1. Owner/Applicant Information		Form Version March 05	
USA	CE A	Action ID No.		DWQ No.
		(If any particular item is	not applicable to this pro	oject, please enter "Not Applicable" or "N/A".)
I.	Pr	ocessing		
	1.	Section 404 Perm	it	this project:  Riparian or Watershed Buffer Rules Isolated Wetland Permit from DWQ Express 401 Water Quality Certification
	<u>2.</u>	Nationwide, Regional	or General Permit N	Jumber(s) Requested: NW 12, NW 23, NW 33
	3.			y because written approval for the 401 Certification
	4.	for mitigation of imp		stem Enhancement Program (NCEEP) is proposed ptance letter from NCEEP, complete section VIII,
	5.	4), and the project is	s within a North C	Carolina's twenty coastal counties (listed on page arolina Division of Coastal Management Area of ge 2 for further details), check here:
II.	Aŗ	oplicant Information		
	1.	Name:		
				Fax Number: (919)-715-1501
	2.	must be attached if the Name:	e Agent has signator N/A	and dated copy of the Agent Authorization letter y authority for the owner/applicant.)
		Telephone Number: E-mail Address:		Fax Number:

#### III. Project Information

Attach a vicinity map clearly showing the location of the property with respect to local landmarks such as towns, rivers, and roads. Also provide a detailed site plan showing property boundaries and development plans in relation to surrounding properties. Both the vicinity map and site plan must include a scale and north arrow. The specific footprints of all buildings, impervious surfaces, or other facilities must be included. If possible, the maps and plans should include the appropriate USGS Topographic Quad Map and NRCS Soil Survey with the property boundaries outlined. Plan drawings, or other maps may be included at the applicant's discretion, so long as the property is clearly defined. For administrative and distribution purposes, the USACE requires information to be submitted on sheets no larger than 11 by 17-inch format; however, DWQ may accept paperwork of any size. DWQ prefers full-size construction drawings rather than a sequential sheet version of the full-size plans. If full-size plans are reduced to a small scale such that the final version is illegible, the applicant will be informed that the project has been placed on hold until decipherable maps are provided.

1.	Name of project: Replacement of Bridge No. 251 over Hall Creek
2.	T.I.P. Project Number or State Project Number (NCDOT Only): B-4040
3.	Property Identification Number (Tax PIN): N/A
4.	Location County: Burke Nearest Town: Morganton Subdivision name (include phase/lot number): N/A Directions to site (include road numbers/names, landmarks, etc.): From Morganton take I-40 west to exit 94. Take Dysartsville Road (SR 1129) south approximately 3.5 miles to Morrison Road (SR1128) on left. Take Morrison Road to approximately 1.5 miles to the bridge site.
5.	Site coordinates (For linear projects, such as a road or utility line, attach a sheet that separately lists the coordinates for each crossing of a distinct waterbody.)  Decimal Degrees (6 digits minimum): <u>UTM 17 426445E 3945145N (WGS84/NAD83)</u>
6.	Property size (acres): approximately 1.4 acres (length 768.7 x width 80 feet = 61,496 SF)
7.	Name of nearest receiving body of water: Hall Creek
8.	River Basin: Catawba River Basin (USGS Catalog Unit Number-03050102)  (Note – this must be one of North Carolina's seventeen designated major river basins. The River Basin map is available at <a href="http://h2o.enr.state.nc.us/admin/maps/">http://h2o.enr.state.nc.us/admin/maps/</a> .)  Describe the existing conditions on the site and general land use in the vicinity of the project at the time of this application: The project area lies in a rural area in the western part of

Burke County. Surrounding land use is primarily agricultural land.

- 9. Describe the overall project in detail, including the type of equipment to be used: The project will consist of replacing the old bridge over Hall Creek with a 3 @ 9' x 8' reinforced concrete box culvert (RCBC) at approximately the same location and roadway elevation of the existing structure. The approach roadway will consist of one 10-foot lane and one lane varying from 10 feet to 13 feet with shoulder widths of at least 5 feet. Shoulder widths will be increased by at least 3 feet where guardrail is warranted. Traffic will be detoured off-site, along surrounding roads, during construction. Construction equipment will consist of heavy-duty trucks, earth moving, equipment, cranes, etc.
- 10. Explain the purpose of the proposed work: The bridge has a sufficiency ratio of 38.8 out of 100. The deck is 19.2 feet wide and the structure is composed mainly of timber. Rehabilitation of the existing deteriorating bridge is neither practical nor economical.

#### IV. Prior Project History

If jurisdictional determinations and/or permits have been requested and/or obtained for this project (including all prior phases of the same subdivision) in the past, please explain. Include the USACE Action ID Number, DWQ Project Number, application date, and date permits and certifications were issued or withdrawn. Provide photocopies of previously issued permits, certifications or other useful information. Describe previously approved wetland, stream and buffer impacts, along with associated mitigation (where applicable). If this is a NCDOT project, list and describe permits issued for prior segments of the same T.I.P. project, along with construction schedules.

#### V. Future Project Plans

Are any future permit requests anticipated for this project? If so, describe the anticipated work, and provide justification for the exclusion of this work from the current application.

N/A

#### VI. Proposed Impacts to Waters of the United States/Waters of the State

It is the applicant's (or agent's) responsibility to determine, delineate and map all impacts to wetlands, open water, and stream channels associated with the project. Each impact must be listed separately in the tables below (e.g., culvert installation should be listed separately from riprap dissipater pads). Be sure to indicate if an impact is temporary. All proposed impacts, permanent and temporary, must be listed, and must be labeled and clearly identifiable on an accompanying site plan. All wetlands and waters, and all streams (intermittent and perennial) should be shown on a delineation map, whether or not impacts are proposed to these systems. Wetland and stream evaluation and delineation forms should be included as appropriate. Photographs may be included at the applicant's discretion. If this proposed impact is strictly for wetland or stream mitigation, list and describe the impact in Section VIII below. If additional space is needed for listing or description, please attach a separate sheet.

- 1. Provide a written description of the proposed impacts: There will be 98 linear feet of permanent and 25 linear feet of temporary stream impacts, in addition to 0.02 acre of permanent fill and 0.03 acres of temporary fill in surface water, from the construction of the culvert. There will be 0.002 acre of temporary excavation in surface waters, and impact to 4 linear feet of stream channel due to the installation of a water line.
- 2. Individually list wetland impacts. Types of impacts include, but are not limited to mechanized clearing, grading, fill, excavation, flooding, ditching/drainage, etc. For dams, separately list impacts due to both structure and flooding.

Wetland Impact Site Number (indicate on map)	Type of Impact	Type of Wetland (e.g., forested, marsh, herbaceous, bog, etc.)	Located within 100-year Floodplain (yes/no)	Distance to Nearest Stream (linear feet)	Area of Impact (acres)						
N/A											
Total Wetland Impact (acres)											

- 3. List the total acreage (estimated) of all existing wetlands on the property: N/A
- 4. Individually list all intermittent and perennial stream impacts. Be sure to identify temporary impacts. Stream impacts include, but are not limited to placement of fill or culverts, dam construction, flooding, relocation, stabilization activities (e.g., cement walls, rip-rap, crib walls, gabions, etc.), excavation, ditching/straightening, etc. If stream relocation is proposed, plans and profiles showing the linear footprint for both the original and relocated streams must be included. To calculate acreage, multiply length X width, and then divide by 43,560.

Stream Impact Number (indicate on map)	Stream Name	Type of Impact	Perennial or Intermittent?	Average Stream Width Before Impact	Impact Length (linear feet)	Area of Impact (acres)
1	Hall Creek	Permanent Fill from culvert	Perennial	20	98	0.02
1	Hall Creek	Temporary disturbance from culvert construction	Perennial	20	25	0.03
1	Hall Creek	*Temporary Excavation	Perennial	20	* 4	0.002
	123	0.052				

<sup>\*</sup> The waterline will be placed in an area already disturbed by the construction of the culvert.

5. Individually list all open water impacts (including lakes, ponds, estuaries, sounds, Atlantic Ocean and any other water of the U.S.). Open water impacts include, but are not limited to fill, excavation, dredging, flooding, drainage, bulkheads, etc.

Open Water Impact Site Number (indicate on map)	Name of Waterbody (if applicable)	Type of Impact	Type of Waterbody (lake, pond, estuary, sound, bay, ocean, etc.)	Area of Impact (acres)						
N/A										
Total Open Water Impact (acres)										

#### 6. List the cumulative impact to all Waters of the U.S. resulting from the project:

Stream Impact (acres):	0.05
Wetland Impact (acres):	N/A
Open Water Impact (acres):	N A
Total Impact to Waters of the U.S. (acres)	0.05
Total Stream Impact (linear feet):	1231

<sup>&</sup>lt;sup>1</sup> The waterline will be placed in an area already disturbed by the construction of the culvert.

7.	Isolated Waters  Do any isolated waters exist on the property?  Yes No
	Describe all impacts to isolated waters, and include the type of water (wetland or stream) and
	the size of the proposed impact (acres or linear feet). Please note that this section only
	applies to waters that have specifically been determined to be isolated by the USACE.  N/A
8.	Pond Creation
	If construction of a pond is proposed, associated wetland and stream impacts should be
	included above in the wetland and stream impact sections. Also, the proposed pond should
	be described here and illustrated on any maps included with this application.
	Pond to be created in (check all that apply):  uplands  stream  wetlands
	Describe the method of construction (e.g., dam/embankment, excavation, installation of
	draw-down valve or spillway, etc.): N/A
	Proposed use or purpose of pond (e.g., livestock watering, irrigation, aesthetic, trout pond
	local stormwater requirement, etc.): N/A
	Current land use in the vicinity of the pond: N/A
	Size of watershed draining to pond: Expected pond surface area:

#### VII. Impact Justification (Avoidance and Minimization)

Specifically describe measures taken to avoid the proposed impacts. It may be useful to provide information related to site constraints such as topography, building ordinances, accessibility, and financial viability of the project. The applicant may attach drawings of alternative, lower-impact site layouts, and explain why these design options were not feasible. Also discuss how impacts were minimized once the desired site plan was developed. If applicable, discuss construction techniques to be followed during construction to reduce impacts. Due to the presence of surface waters within the project study area, avoidance of all impacts is not possible.

#### VIII. Mitigation

DWQ - In accordance with 15A NCAC 2H .0500, mitigation may be required by the NC Division of Water Quality for projects involving greater than or equal to one acre of impacts to freshwater wetlands or greater than or equal to 150 linear feet of total impacts to perennial streams.

USACE – In accordance with the Final Notice of Issuance and Modification of Nationwide Permits, published in the Federal Register on January 15, 2002, mitigation will be required when necessary to ensure that adverse effects to the aquatic environment are minimal. Factors including size and type of proposed impact and function and relative value of the impacted aquatic resource will be considered in determining acceptability of appropriate and practicable mitigation as proposed. Examples of mitigation that may be appropriate and practicable include, but are not limited to: reducing the size of the project; establishing and maintaining wetland and/or upland vegetated buffers to protect open waters such as streams; and replacing losses of aquatic resource functions and values by creating, restoring, enhancing, or preserving similar functions and values, preferable in the same watershed.

If mitigation is required for this project, a copy of the mitigation plan must be attached in order for USACE or DWQ to consider the application complete for processing. Any application lacking a required mitigation plan or NCEEP concurrence shall be placed on hold as incomplete. An applicant may also choose to review the current guidelines for stream restoration in DWQ's Draft Technical Guide for Stream Work in North Carolina, available at <a href="http://h2o.enr.state.nc.us/ncwetlands/strmgide.html">http://h2o.enr.state.nc.us/ncwetlands/strmgide.html</a>.

1. Provide a brief description of the proposed mitigation plan. The description should provide as much information as possible, including, but not limited to: site location (attach directions and/or map, if offsite), affected stream and river basin, type and amount (acreage/linear feet) of mitigation proposed (restoration, enhancement, creation, or preservation), a plan view, preservation mechanism (e.g., deed restrictions, conservation easement, etc.), and a description of the current site conditions and proposed method of construction. Please attach a separate sheet if more space is needed.

N/A

2. Mitigation may also be made by payment into the North Carolina Ecosystem Enhancement Program (NCEEP). Please note it is the applicant's responsibility to contact the NCEEP at (919) 715-0476 to determine availability, and written approval from the NCEEP indicating that they are willing to accept payment for the mitigation must be attached to this form. For additional information regarding the application process for the NCEEP, check the NCEEP website at <a href="http://h2o.enr.state.nc.us/wrp/index.htm">http://h2o.enr.state.nc.us/wrp/index.htm</a>. If use of the NCEEP is proposed, please check the appropriate box on page five and provide the following information:

Amount of stream mitigation requested (linear feet): 98

Amount of buffer mitigation requested (square feet): N/A

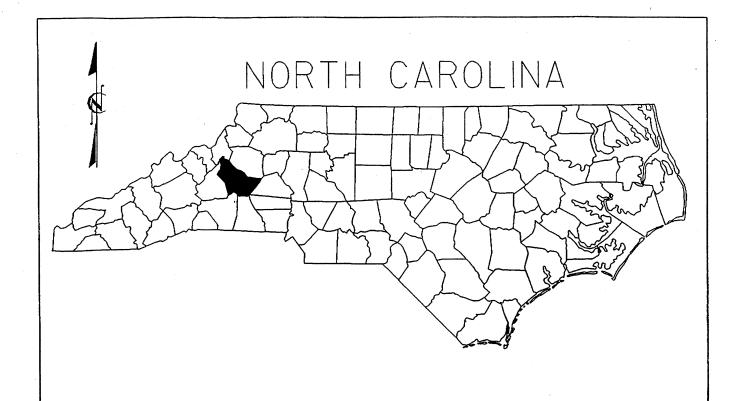
Amount of Riparian wetland mitigation requested (acres): N/A

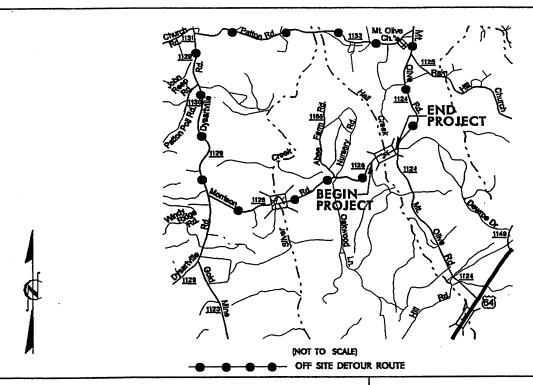
Amount of Non-riparian wetland mitigation requested (acres): N/A

IX.	Environmental Documentation (require	d by DWQ)		
	<ol> <li>Does the project involve an expendit public (federal/state) land?</li> </ol>		ral/state/local) fo	unds or the use of
	2. If yes, does the project require preparequirements of the National or North Note: If you are not sure whether a coordinator at (919) 733-5083 to review Yes ⊠ No □	n Carolina Environr n NEPA/SEPA doc	nental Policy A ument is requir	ct (NEPA/SEPA)? ed, call the SEPA
	3. If yes, has the document review been attach a copy of the NEPA or SEPA fire			use? If so, please
<b>X.</b>	Proposed Impacts on Riparian and Wat	ershed Buffers (red	quired by DWQ	2)
	It is the applicant's (or agent's) responsible required state and local buffers associated justification for these impacts in Section V and must be clearly identifiable on the accumant, whether or not impacts are propose Regional Office may be included as appropriately discretion.  1. Will the project impact protected ripact (Neuse), 15A NCAC 2B .0259 (Tar-Pa 2B .0250 (Randleman Rules and Widentify)? Y  2. If "yes", identify the square feet and a If buffer mitigation is required calculated buffer multipliers.	d with the project. II above. All propositions are planted to the buffers. Photogrammico, 15A NCAC ater Supply Buffer es \( \subseteq \text{No} \subseteq \text{No} \subseteq Creage of impact to a creage of impact to a compare to the compact of the supply are to the compact to the compact of the compact to the compact of the compact of the compact to the compact of the comp	The applicant osed impacts mun. All buffers man Correspondence aphs may also fied within 15A co2B .0243 (Cata Requirements) of each zone of the count of mitigation	must also provide ust be listed herein, nust be shown on a ce from the DWQ be included at the NCAC 2B .0233 tawba) 15A NCAC a, or other (please the riparian buffers.
	Zone* Impact (square feet)	Multiplier	Required Mitigation	
	1	3 (2 for Catawba)		
	2	1.5		
	Total			
	* Zone 1 extends out 30 feet perpendicular f additional 20 feet from the edge of Zone 1.	from the top of the near ba	nk of channel; Zone 2	2 extends an
	3. If buffer mitigation is required, pleas Donation of Property, Riparian Buffer Riparian Buffer Restoration Fund). P within 15A NCAC 2B .0242 or .0244, or	er Restoration / Er lease attach all app	nhancement, or	Payment into the

Amount of Coastal wetland mitigation requested (acres): N/A

XI.	Stormwater (required by DWQ)
	Describe impervious acreage (existing and proposed) versus total acreage on the site. Discuss stormwater controls proposed in order to protect surface waters and wetlands downstream from the property. If percent impervious surface exceeds 20%, please provide calculations demonstrating total proposed impervious level. NCDOT BMPs will be followed to control stormwater runoff during construction
XII.	Sewage Disposal (required by DWQ)
	Clearly detail the ultimate treatment methods and disposition (non-discharge or discharge) of wastewater generated from the proposed project, or available capacity of the subject facility.  N/A
XIII.	Violations (required by DWQ)
	Is this site in violation of DWQ Wetland Rules (15A NCAC 2H .0500) or any Buffer Rules? Yes No
	Is this an after-the-fact permit application? Yes \( \square \) No \( \square \)
XIV.	Cumulative Impacts (required by DWQ)
	Will this project (based on past and reasonably anticipated future impacts) result in additional development, which could impact nearby downstream water quality? Yes No If yes, please submit a qualitative or quantitative cumulative impact analysis in accordance with the most recent North Carolina Division of Water Quality policy posted on our website at <a href="http://h2o.enr.state.nc.us/ncwetlands">http://h2o.enr.state.nc.us/ncwetlands</a> . If no, please provide a short narrative description: This project involves the replacement of a bridge with a culvert. Impervious area will remain approximately the same as current conditions.
XV.	Other Circumstances (Optional):
	It is the applicant's responsibility to submit the application sufficiently in advance of desired construction dates to allow processing time for these permits. However, an applicant may choose to list constraints associated with construction or sequencing that may impose limits on work schedules (e.g., draw-down schedules for lakes, dates associated with Endangered and Threatened Species, accessibility problems, or other issues outside of the applicant's control).
	PCASIL 55 9/6/05
	Applicant/Agent's Signature Date
	(Agent's signature is valid only if an authorization letter from the applicant is provided.)





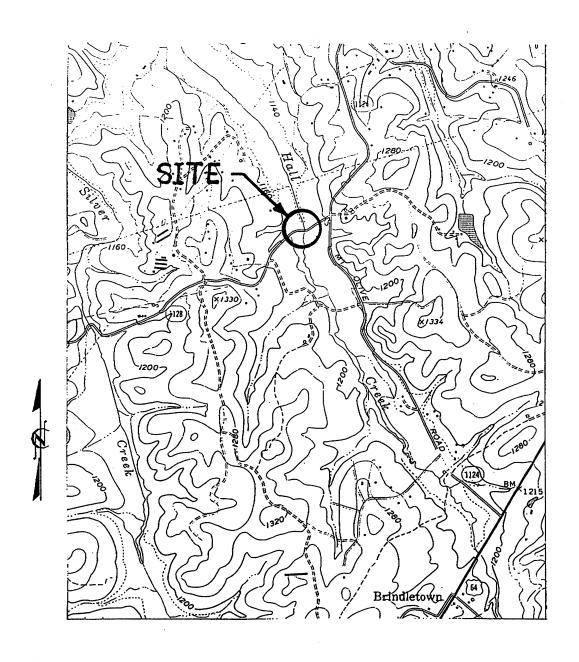
## VICINITY MAPS

### NCDOT

DIVISION OF HIGHWAYS
BURKE COUNTY
PROJECT: 33406.1.1 (B-4040)
BRIDGE NO.251 OVER
HALL CREEK AND
APPROACHES ON SR 1128

SHEET OF 11

11/5/04



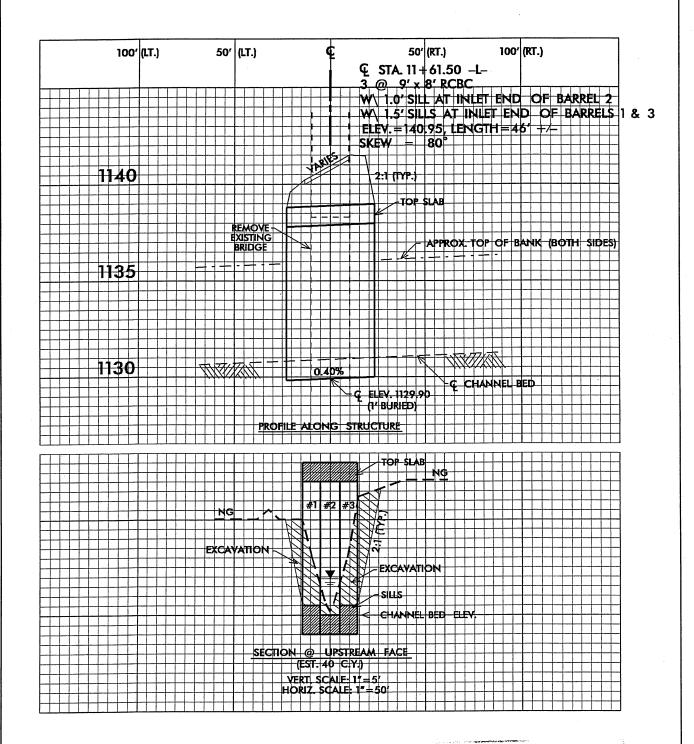
### TOPO MAP

SCALE: 1": 2000'

### NCDOT

DIVISION OF HIGHWAYS
BURKE COUNTY
PROJECT: 33406.1.1 (B-4040)
BRIDGE NO.251 OVER
HALL CREEK AND
APPROACHES ON SR 1128

SHEET 2 OF 11 11/5/04





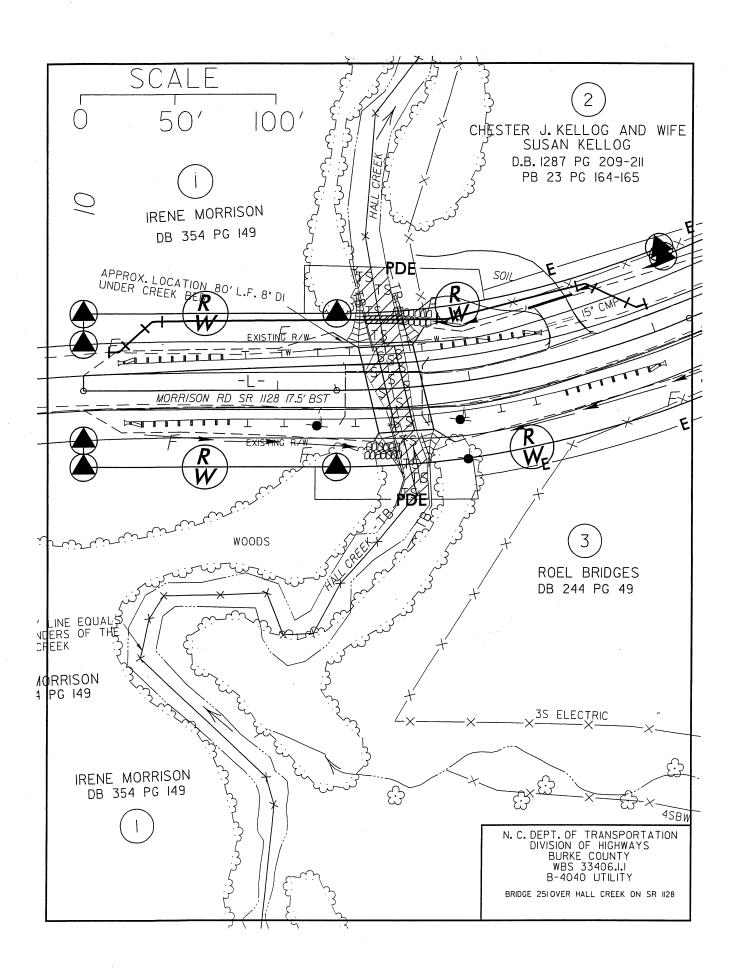
DIVISION FOF HIGHWAYS
BURKE COUNTY

PROJECT: 53406.1.1 (B-4040)

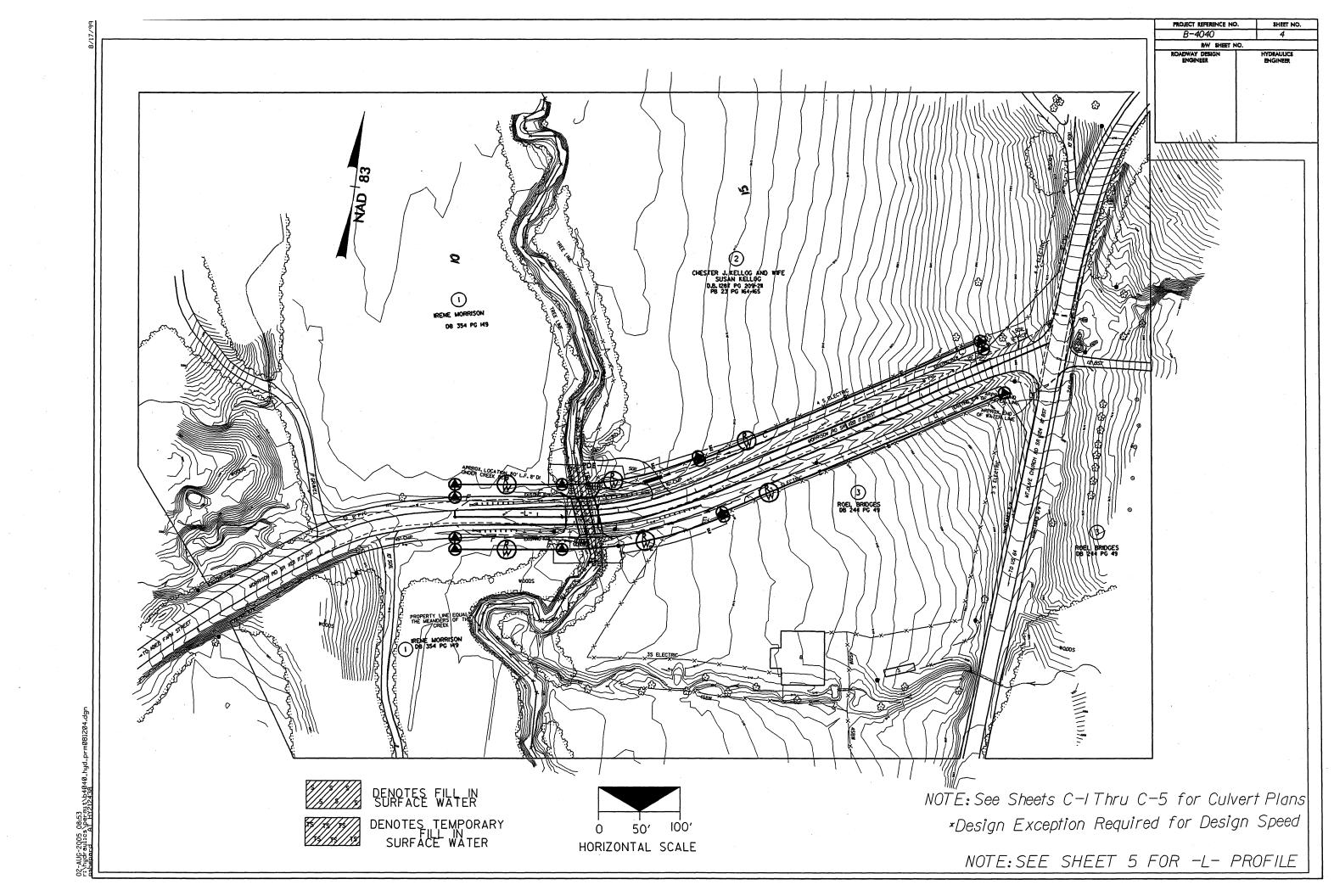
BRIDGE NO. 251 OVER

HALL CREEK AND

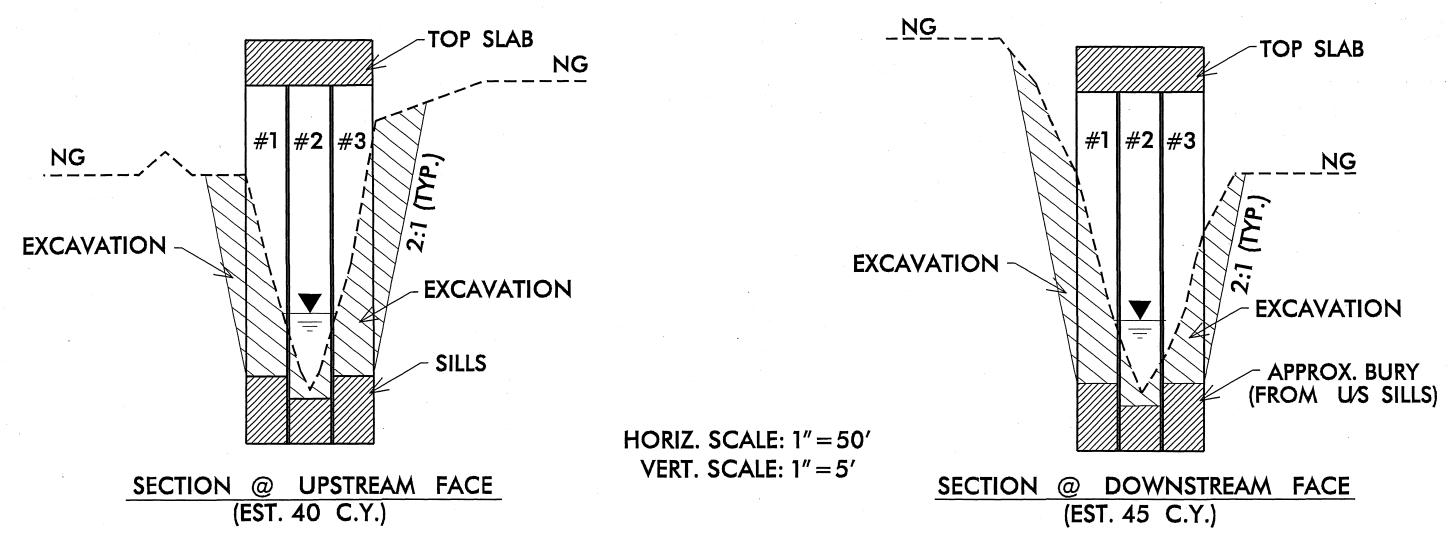
APPROACHES ON SR 1128



PROJECT REFERENCE NO.
B-4040 ROEL BRIDGES DB 244 PG 49 DENOTES FILL IN SURFACE WATER NOTE: See Sheets C-I Thru C-5 for Culvert Plans \*Design Exception Required for Design Speed DENOTES TEMPORARY FILL IN SURFACE WATER HORIZONTAL SCALE NOTE: SEE SHEET 5 FOR -L- PROFILE



## DETAIL EXCAVATION © CULVERT ENTRANCE AND EXIT



		Natural	Stream	: (#)	c													0
	ACTS	Existing Channel	Impacts Temp.	(£)	25													25
	SURFACE WATER IMPACTS	Existing Channel	Impacts Permanent	æ	86													86
RY	SURFACE	Temp.	SW impacts	(ac)	0.03													0.03
CT SUMM		Permanent	SW impacts	(ac)	0.02													0.02
MIT IMPA		Hand Clearing	in Wetlands	(ac)	0													0
WETLAND PERMIT IMPACT SUMMARY	CTS	Excavation Mechanized	Clearing in Wetlands	(ac)	0													0
W	WETLAND IMPACTS	Excavation	in Wetlands	(ac)	0													0
	WET	Temp.	_	(ac)	0													0
		Permanent	Fill In Wetlands	(ac)	0													0
			Structure Size / Type		3@9'×8'	RCBC												
		:	Station (From/To)		11+61.50 -L-	C. L. STA.		ū.			-							
		ë	No.		-													TOTALS

NC DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

BURKE COUNTY

WBS - 33406.1.1 (B-4040)

BRIDGE # 251 OVER HALL CREEK ON SR 1128

SHEET 11 OF 11

